



### MEMORANDUM

Date: April 22, 2004

To: Steve Henrichsen

From: Devin Biesecker, Nicole Fleck-Tooze

Subject: 2003 Annual Review of the Comprehensive Plan

Watershed Management Comments - REVISED

cc: Allan Abbott, Ben Higgins

Glenn Johnson

Below are our comments relating to proposed amendments where we identified issues related to watershed management.

#### Amendment 04009 - S. 134th and 'A' Street

The western portion of the parcel identified in the application for this proposed amendment includes the Stevens Creek floodplain and floodway, which is designated as Green Space and Environmental Resources on the Land Use Plan.

The land use designation within the floodplain should remain Green Space and Environmental Resources. An important management strategy embodied in the Comprehensive Plan is to designate areas for future development outside of the floodplain to avoid introducing new development to flood risks and to preserve the important functions of the floodplain. The floodplain along Stevens Creek is designated as Green Space and Environmental Resources in order to preserve the natural functions of the floodplain, including flood storage, conveyance and riparian habitat. The recommendations of the Mayor's Floodplain Task Force are consistent with this approach.

Additional information regarding the Stevens Creek floodplain is anticipated to be available following the completion of the Stevens Creek watershed study in the next year by the City and NRD.

# Amendment 04010 - S, 66th and Highway 2

This proposed amendment contains a roadway that would serve as an alternate connection between S. 56th Street and Highway 2. The alignment shown on the proposed amendment does not cross the main channel of Beal Slough, however it would still significantly impact the floodplain. The proposed roadway would cross a secondary channel, shown as floodplain on the Flood Insurance Rate Map, and essentially cut off flow to this portion of the floodplain unless a bridge type structure were to be built. Removing this secondary channel from the floodplain has the potential to impact flood elevations upstream as well as impact the overtopping frequency of S. 56th Street.

There is a proposed water quality wetland near the intersection created by the proposed roadway and S. 56th Street designated in the Beal Slough Stormwater Master Plan. The design of this wetland is currently underway as part of the S. 56th Street widening project. This area is shown as Green Space in the Lincoln/Lancaster County Comprehensive Plan, and the proposed water quality wetland and preservation of the floodplain in this area are consistent with this designation. Depending on the design, a future roadway crossing may be inconsistent with the Green Space land use designation, and could adversely affect flood heights and the proposed wetland.

#### Amendment 04012 - N. 84th and Adams

The eastern portion of the map for the amendment property shown in the application includes Stevens Creek floodplain and floodway, which is designated as Green Space and Environmental Resources on the Land Use Plan.

The land use designation within the floodplain should remain Green Space and Environmental Resources. An important management strategy embodied in the Comprehensive Plan is to designate areas for future development outside of the floodplain to avoid introducing new development to flood risks and to preserve the important functions of the floodplain. The floodplain along Stevens Creek is designated as Green Space and Environmental Resources in order to preserve the natural functions of the floodplain, including flood storage, conveyance and riparian habitat. The recommendations of the Mayor's Floodplain Task Force are consistent with this approach.

Additional information regarding the Stevens Creek floodplain and other watershed issues related to future urbanization is anticipated to be available following the completion of the Stevens Creek watershed study in the next year by the City and NRD.

# Amendment 04011 (S. 84th and Hwy 2) and 04015 (S. 70th and Yankee Hill Rd.)

Both of the proposed amendments 04011 and 04015 are in the upper portion of the Beal Slough drainage basin. The City of Lincoln has completed a watershed Master Plan for the Beal Slough

basin and the plan has been adopted as a subarea plan in the Lincoln/Lancaster County Comprehensive Plan. New development in this basin will be expected to utilize the Master Plan models as stated in Section 2.05 of the City of Lincoln Design Standards.

Urbanization of Beal Slough has changed the volume and rate of stormwater runoff from intense storm events. The stormwater runoff rate has increased in the last 20 to 25 years by about 30% in the mid to upper portions of the basin, and by as much as 80% downstream of 27th Street. This has resulted in more frequent and damaging flooding, erosion and degradation of stream channels within the watershed.

The adopted watershed Master Plan identifies several target peak flow rates for stormwater runoff that need to be met to help reduce flooding and associated impacts in the basin. Seven subareas in the upper portion of the basin are delineated in the Master Plan. Amendment 04011 at 84th and Hwy 2 is in subarea D, and Amendment 04015 at 70th and Yankee Hill Road is in subarea E. The Plan indicates that the "implementation of regional storage within subareas A, D, E, and G could substantially contribute to reduction of...flow rates" to meet the goals of the Master Plan. Stormwater storage is an important consideration in these locations and the City and NRD continue to evaluate the opportunities for regional stormwater facilities in these areas.

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